

01409387 MULICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

MULICA RIVER BASIN

LOCATION.--Lat 39°44'25", long 74°43'36" referenced to North American Datum of 1983, Shamong Township, Burlington County, NJ, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1980 to current year.

GAGE.--Staff gage.

REMARKS.--Occasional regulation by Atsion Lake and small ponds upstream.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Date	Discharge, in ft ³ /s
Nov 28, 2007	17.8
Feb 26, 2008	33.9
May 20, 2008	45.0
Aug 28, 2008	10.1

01409387 MULICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator; and Trace Element Assessment (303d) special study site, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 14. Samples on Jan 10, Apr 2, and Jun 19 were for the Trace Element Assessment (303d).

COOPERATION.--Samples on Jan 10, Apr 2, and Jun 19 were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Sample medium and type	Instantaneous discharge, ft ³ /s (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
Nov									
28...	1030	Surface water, regular	18	1.1	.093	.071	771	11.4	97
Jan									
10...	1200	<i>QC - Artificial, field blank</i>	--	--	--	--	--	--	--
10...	1215	Surface water, regular	--	1.5	--	--	766	10.8	90
Feb									
26...	1130	Surface water, regular	34	.9	.243	.180	749	11.8	92
Apr									
02...	1200	Surface water, regular	--	1.5	--	--	767	10.4	97
May									
20...	1030	Surface water, regular	45	2.6	.320	.244	747	10.1	102
Jun									
19...	1300	Surface water, regular	--	4.2	--	--	759	6.7	81
Aug									
28...	1020	Surface water, regular	10	3.4	.256	.204	759	7.6	88

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)
Nov 28...	4.8	56	10.0	8.2	8	1.71	.854	.84	4.84	<1.7	8.09	<.12	4.8
Jan 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan 10...	5.1	71	12.5	7.7	--	--	--	--	--	--	--	--	--
Feb 26...	4.2	72	7.0	5.0	8	1.75	.947	.79	5.14	--	8.35	<.12	3.9
Apr 02...	4.7	57	14.0	12.1	--	--	--	--	--	--	--	--	--
May 20...	4.4	56	12.0	15.8	6	1.24	.676	.67	4.84	<1.7	8.69	<.12	2.4
Jun 19...	4.7	50	22.0	24.0	--	--	--	--	--	--	--	--	--
Aug 28...	5.0	44	22.0	22.2	6	1.43	.702	.64	3.94	<1.7	5.60	<.12	3.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd mg/L as P (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)
Nov 28...	9.70	41	3	E.09	.032	.10	E.04	E.19	E.23	E.008	<.008	E.005	E.6
Jan 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb 26...	12.9	38	3	.19	.018	.12	E.03	.31	E.34	E.006	<.008	E.005	E.1
Apr 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 20...	7.21	37	7	.21	.012	.05	.07	.27	.34	E.004	<.008	.010	1.0
Jun 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 28...	6.92	29	2	.23	.021	E.03	.10	E.26	E.36	E.004	<.008	.013	1.0

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltred, mg/L (00681)	Alum- inum, water, fltred, µg/L (01106)	Boron, water, fltred, µg/L (01020)	Iron, water, fltred, µg/L (01046)	Mercury water, fltred, µg/L (71890)	Mercury water, unfltred recover- able, µg/L (71900)
Nov 28...	M	E.5	2.4	--	15	--	--	--
Jan 10...	--	--	--	--	--	--	<.010	--
10...	--	--	--	--	--	--	<.010	<.010
Feb 26...	<.04	.1	6.0	--	15	--	--	--
Apr 02...	--	--	--	--	--	--	<.010	<.010
May 20...	<.04	1.0	6.0	143	16	414	--	--
Jun 19...	--	--	--	--	--	--	E.006	E.006
Aug 28...	<.04	1.0	3.9	--	12	--	--	--